This circular will be sent regularly to all who apply for it.

United States Department of Agriculture,

WASHINGTON, D. C., *April 29, 1916.*

MONTHLY LIST OF PUBLICATIONS.

[April, 1916.]

HOW TO SECURE PUBLICATIONS.

A copy of any of the publications listed herein, including those with price named, except the Journal of Agricultural Research, Experiment Station Record, and publications of the Weather Bureau, may be obtained free upon application to the Editor and Chief of the Division of Publications, United States Department of Agriculture, Washington, D. C., as long as the department's supply lasts.

After this department's supply of the publications listed below is exhausted, those publications of which the price is indicated can still be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., but by purchase only, and at prices noted herein.

Send all remittances to the Superintendent of Documents direct. His office is not a part of the Department of Agriculture.

FARMERS' BULLETINS.—FOR FREE DISTRIBUTION.

No price is quoted for Farmers' Bulletins for the reason that the department's supply of the current numbers is ordinarily sufficient to make it possible to send them free to all applicants.

Muscadine Grapes. By George C. Husmann, Pomologist in Charge, and Charles Dearing, Scientific Assistant, Viticultural Investigations, Office of Horticultural and Pomological Investigations. Pp. 28, figs. 29. Contribution from the Bureau of Plant Industry. Apr. 1, 1916. **(Farmers' Bulletin 709.)**

For distribution in South Atlantic and Gulf Coast States.

Sheep Scab. By Marion Imes, Veterinary Inspector, Zoological Division. Pp. 36, figs. 21. Contribution from the Bureau of Animal Industry. Apr. 17, 1916. **(Farmers' Bulletin 713.)**

Is intended for the information of sheep raisers and live-stock sanitary officers concerned in the prevention, cure, or eradication of sheep scab. It supersedes Farmers' Bulletin 159.

Cooperative Live Stock Shipping Associations. By S. W. Doty, Assistant in Marketing Live Stock and Meats, and L. D. Hall, Specialist in Marketing Live Stock and Meats. Pp. 16, figs. 3. Contribution from the Office of Markets and Rural Organization. Apr. 10, 1916. **(Farmers' Bulletin 718.)**

Is intended to give to farmers and stockmen who have small numbers of live stock to sell information as to how to organize for the purpose of making car-lot shipments to central markets. It should be of special interest to communities which do not have satisfactory local markets for live stock and where cooperative shipping associations are feasible.

The Rose-Chafer. A Destructive Garden and Vineyard Pest. By F. H. Chittenden, In Charge of Truck-Crop and Stored-Product Insect Investigations, and A. L. Quaintance, In Charge of Deciduous Fruit Insect Investigations. Pp. 8, fig. 4. Contribution from the Bureau of Entomology. Apr. 28, 1916. **(Farmers' Bulletin 721.)**

Describes life history and habits of, and methods of control of this insect.

The Leaf Blister Mite of Pear and Apple. By A. L. Quaintance, In Charge of Deciduous Fruit Insect Investigations. Pp. 6, figs. 4. Contribution from the Bureau of Entomology. Apr. 21, 1916. **(Farmers' Bulletin 722.)**

For general distribution.

The Oyster-Shell Scale and the Scurfy Scale. By A. L. Quaintance, In Charge of Deciduous Fruit Insect Investigations, and E. R. Sasscer, Collaborator. Pp. 16, figs. 3. Contribution from the Bureau of Entomology. Apr. 26, 1916. **(Farmers' Bulletin 723.)**

Of interest to fruit growers generally.

Wireworms Destructive to Cereal and Forage Crops. By J. A. Hyslop, Entomological Assistant, Cereal and Forage Insect Investigations. Pp. 12, figs. 6. Contribution from the Bureau of Entomology. Apr. 29, 1916. **(Farmers' Bulletin 725.)**

Suitable for general distribution.

DEPARTMENTAL BULLETINS.—TECHNICAL.

The publications listed below are technical or scientific treatises or bulletins applying to a special industry or locality. The edition is limited, but they will be furnished free to persons who can use such specialized information as long as the supply lasts. However, to insure prompt receipt, remit price to the Superintendent of Documents.

A Study of the Preparation of Frozen and Dried Eggs in the Producing Section. By M. E. Pennington, Chief, Food Research Laboratory, M. K. Jenkins, Assistant Bacteriological Expert, Assisted by S. H. Ross, E. Q. St. John, Norman Hendrickson, and W. B. Hicks, of the Food Research Laboratory and the Omaha Food and Drug Inspection Laboratory. Pp. 99, pls. 17, figs. 7. Contribution from the Bureau of Chemistry. (Professional Paper.) Apr. 28, 1916. **(Department Bulletin 224.)** Price, 30 cents.

Gives a general statement of the work done and the findings which should be of interest to the general egg industry, but more particularly to manufacturers of frozen and dried products, and bakers who use these products.

Forest Pathology in Forest Regulation. By E. P. Meinecke, Forest Pathologist, Office of Investigations in Forest Pathology. Pp. 63. Contribution from the Bureau of Plant Industry. (Professional Paper.) Apr. 7, 1916. **(Department Bulletin 275.)** Price, 10 cents.

This bulletin discusses the bearing of modern forest pathology on forest regulation.

Development of Sugar and Acid in Grapes During Ripening. By William B. Alwood, Enological Chemist, with the Collaboration of B. J. Hartmann, J. R. Eoff, M. J. Ingle, and S. F. Sherwood. Pp. 28. Contribution from the Bureau of Chemistry. Apr. 11, 1916. **(Department Bulletin 335.)** Price, 5 cents.

Of interest to growers of grapes for commercial purposes.

Experiments on the Economical Use of Irrigation Water in Idaho. By Don H. Bark, Irrigation Engineer, Division of Irrigation Investigations. Pp. 58, pls. 3, figs. 13. Contribution from the Office of Public Roads and Rural Engineering. (Professional Paper.) Apr. 21, 1916. **(Department Bulletin 339.)** Price, 10 cents.

This bulletin will be of interest to officials administering the water supply of the Western States, to students of irrigation practice, and to farmers.

Ground-Wood Pulp. Part I, The Grinding of Cooked and Uncooked Spruce. Part II, Substitutes for Spruce in the Manufacture of Ground-Wood Pulp. By J. H. Thickens, Chemical Engineer in Forest Products, and G. C. McNaughton, Engineer in Forest Products. Pp. 151, pls. 12, figs. 44, and samples of paper made from different woods. Contribution from the Forest Service. (Professional Paper.) Apr. 26, 1916. **(Department Bulletin 343.)**

None for free distribution and none for sale.

Relation of Mineral Composition and Rock Structure to the Physical Properties of Road Materials. By E. C. Lord, Petrographer. Pp. 26, pls. 8, figs. 3. Contribution from the Office of Public Roads and Rural Engineering. (Professional Paper.) Apr. 4, 1916. **(Department Bulletin 348.)** Price, 10 cents.

Of especial interest to road contractors and engineers.

The Terrapin Scale: An Important Insect Enemy of Peach Orchards. By F. L. Simanton, Entomological Assistant, Deciduous Fruit Insect Investigations. Pp. 96, pls. 3, figs. 19. Contribution from the Bureau of Entomology. (Professional Paper.) Apr. 22, 1916. **(Department Bulletin 351.)** Price, 15 cents.

Describes life history, habits, enemies of, and methods of control for this insect, with report of investigations had at Mont Alto, Pa., in 1912 and 1913.

Extension Course in Soils for Self-Instructed Classes in Movable Schools of Agriculture. By A. R. Whitson, Professor of Soils, University of Wisconsin, and H. B. Hendrick, Assistant in Agricultural Education, States Relations Service. Pp. 92. Contribution from the States Relations Service. (Professional Paper.) Apr. 13, 1916. **(Department Bulletin 355.)** Price, 10 cents.

Is intended for the use of small groups of farmers assembled as a class to study the subject in a systematic manner with one of their number as a leader.

Alaska and Stoner, or "Miracle," Wheats: Two Varieties Much Misrepresented. By Carleton R. Ball, Agronomist in Charge of Western Wheat Investigations, and Clyde E. Leighty, Agronomist in Charge of Eastern Wheat Investigations. Pp. 28, figs. 6. Contribution from the Bureau of Plant Industry. Apr. 27, 1916. **(Department Bulletin 357.)** Price, 5 cents.

For general distribution.

Studies of the Mexican Cotton Boll Weevil in the Mississippi Valley. By R. W. Howe, Entomological Assistant, Southern Field Crop Insect Investigations. Pp. 32, figs. 2. Contribution from the Bureau of Entomology. (Professional Paper.) Apr. 12, 1916. **(Department Bulletin 358.)** Price, 5 cents.

This bulletin is of interest to entomologists in the cotton belt.

Forest Conservation for States in the Southern Pine Region. By J. Girvin Peters, Chief of State Cooperation. Pp. 14. Contribution from the Forest Service. Apr. 15, 1916. **(Department Bulletin 364.)** Price, 5 cents.

The bulletin points out the essential elements in the various forest problems that confront the States in the southern pine region, shows how these problems are interrelated, and forms a basis on which may be founded a plan for solving them, matters of great importance to lumbermen, farmers, and all others interested directly or indirectly in the conservation of the timber resources of that region.

Manufacturing Tests of Cotton Fumigated with Hydrocyanic-Acid Gas. By William S. Dean, Assistant in Cotton Testing. Pp. 12. Contribution from the Office of Markets and Rural Organization. (Professional Paper.) Apr. 24, 1916. **(Department Bulletin 366.)** Price, 5 cents.

Should be of interest to manufacturers and dealers in foreign-grown cotton and cotton yarns, also indirectly of interest to the domestic producers, manufacturers, and dealers in all staple cottons.

REPORTS.

Yearbook of the U. S. Department of Agriculture, 1915. Pp. 632, pls. 75, figs. 13, 69 pp. graphs. Price, 75 cents.

This Yearbook contains the annual report of the Secretary, 72 pages; 24 miscellaneous articles, 331 pages; an appendix, 180 pages; an index, 32 pages. Only 6 out of each 100 copies are allotted to this department, which number is insufficient to supply even its regular correspondents. Other applicants are therefore respectfully referred to their Representative or Delegate in Congress, as the other 94 per cent is allotted to that body. The Superintendent of Documents, Government Printing Office, Washington, D. C., has it for sale at 75 cents per copy.

SERIALS.

Journal of Agricultural Research. (Issued weekly. For sale only.)

Vol. 6, No. 1. April 3, 1916. Contents: Relation of Carbon Bisulphid to Soil Organisms and Plant Growth. By E. B. Fred.—Climatic Conditions as Related to Cercospora beticola. By Venus W. Pool and M. F. McKay. Pp. 1–60, pls. I–IV, figs. 10. Price, 20 cents.

Same, No. 2. April 10, 1916. Contents: Soluble Nonprotein Nitrogen of Soil. By R. S. Potter and R. S. Snyder.—Oviposition of Megastigmus spermotrophus in the Seed of Douglas Fir. By J. M. Miller.—Citrus Canker. By Frederick A. Wolfe. Pp. 61–100, pls. V–XI, figs. 8. Price, 15 cents.

Same, No. 3. April 17, 1916. Contents: Determination of Stearic Acid in Butter Fat. By E. B. Holland, J. C. Reed, and J. P. Buckley, Jr.—Life History and Habits of Two Nematodes Parasitic on Insects. By J. H. Merrill and A. L. Ford.—Insect Injury to Cotton Seedlings. By B. R. Coad and R. W. Howe. Pp. 101–139, pls. XII–XVI, figs. 5. Price, 15 cents.

Same, No. 4. April 24, 1916. Contents: A Sex-Limited Color in Ayrshire Cattle. By Edward N. Wentworth.—Watermelon Stem-End Rot. By F. C. Meier.—Effect of Pasteurization on Mold Spores. By Charles Thom and S. Henry Ayers.—Effect of Water in the Ration on the Composition of Milk. By W. F. Turner, R. H. Shaw, R. P. Norton, and P. A. Wright.—Crowngall Studies, Showing Changes in Plant Structures Due to a Changed Stimulus. By Erwin F. Smith. Pp. 141–182, pls. XVII–XXIII, figs. 4. Price, 15 cents.

NOTE.—Beginning with Volume 5, The Journal of Agricultural Research will be issued weekly and distributed free *only* to the libraries of agricultural colleges and experiment stations, to large universities, technical schools, and such institutions as make suitable exchanges with the department. *It will not be sent free to individuals.* The Superintendent of Documents will receive subscriptions for this publication, the price being $3 per year, 52 numbers.

Experiment Station Record. Vol. XXXIV, No. 5, April, 1916. E. W. Allen, Ph. D., Editor. Pp. 401–500. Price, 15 cents.

Same. Vol. XXXIV, No. 6, Abstract number, Apr. 22, 1916. Pp. 501–600. Price, 15 cents.

NOTE.—The Record is a technical review of the world's scientific literature pertaining to agriculture. It is not intended for general distribution, and its free distribution is restricted to persons connected with the agricultural colleges, experiment stations, and similar institutions, and to libraries and exchanges. It can not be sent free to individuals having no official connection with public institutions. The Superintendent of Documents will receive subscriptions for this publication, which is issued in two volumes a year, ten numbers each, at $1 a volume.

The Monthly Crop Report. Vol. 2, No. 4, April 15, 1916. Pp. 29–40. (Bureau of Crop Estimates.)

Contains data relating to agriculture, including estimates of acreage, conditions, yield, prices, and value of crops and live stock. For free distribution.

SERVICE AND REGULATORY ANNOUNCEMENTS.—FOR SALE ONLY.

These contain *only* information, instructions, and notices governing the enforcement of food and drugs act, meat inspection, 28-hour and quarantine laws, and the various regulations of the department. Issued monthly by certain bureaus. *Free distribution* is limited to persons in the employ of the department, to public officials whose duties render it necessary for them to have such information, to journals especially concerned, and to manufacturers and firms whose business is affected by same. Others desiring copies are respectfully referred to the Superintendent of Documents, Government Printing Office, who has them for sale *only,* at prices noted.

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Bureau of Animal Industry. No. 107. March, 1916. Pp. 21–31. Apr. 28, 1916. Price, 5 cents.

Bureau of Biological Survey. Pp. 1. [Revokes S. R. A. No. 7, dated July 19, 1915.] Apr. 25, 1916. Price, 5 cents.

Bureau of Chemistry. Supplement No. 13. [N. J. 4101–4150.] Pp. 141–246. Apr. 19, 1916. Price, 10 cents.

Bureau of Chemistry. Supplement No. 14. [N. J. 4151–4200.] Pp. 247–315. Apr. 29, 1916. Price, 10 cents.

Federal Horticultural Board. No. 26. March, 1916. Pp. 31–43. Apr. 29, 1916. Price, 5 cents.

Office of Markets and Rural Organization. No. 8. Pp. 51-95. Apr. 15, 1916. Price, 5 cents.

Office of Markets and Rural Organization. No. 9. Pp. 97–117. Apr. 29, 1916. Price, 5 cents.

SOIL SURVEYS.

All requests for soil surveys are referred to the Bureau of Soils for attention, the distribution of same being controlled by that bureau.

Soil Survey of Mississippi County, Arkansas. By E. C. Hall, T. M. Bushnell, L. V. Davis, William T. Carter, jr., and A. L. Patrick. Pp. 42, pl. 1, fig. 1, map. (From F. O. Soils, 1914.) Price, 15 cents.

Soil Survey of the Merced Area, California. By E. B. Watson and Party. Pp. 70, pls. 4, fig. 1, map. (From F. O. Soils, 1914.) Price 25 cents.

Soil Survey of Warren County, Indiana. By E. J. Grimes, of the Indiana Department of Geology, and E. H. Stevens, of the U. S. Department of Agriculture. Pp. 39, fig. 1, map. (From F. O. Soils, 1914.) Price, 15 cents.

Soil Survey of Muscatine County Iowa. By H. W. Hawker, of the U. S. Department of Agriculture, and H. W. Johnson, of the Iowa Agricultural Experiment Station. Pp. 64, fig. 1, map. (From F. O. Soils, 1914.) Price, 15 cents.

Soil Survey of Seward County, Nebraska. By A. H. Meyer and E. H. Smies, of the U. S. Department of Agriculture, and L. T. Skinner and W. A. Rockie, of the Nebraska Soil Survey. Pp. 40, fig. 1, map. (From F. O. Soils, 1914.) Price, 15 cents.

Soil Survey of Thurston County, Nebraska. By A. H. Meyer and M. W. Beck, of the U. S. Department of Agriculture, and W. A. Rockie, of the Nebraska Soil Survey. Pp. 44, fig. 1, map. (From F. O. Soils, 1914.) Price, 15 cents.

Soil Survey of Florence County, South Carolina. By J. H. Agee, J. A. Kerr, and W. E. McLendon. Pp. 36, fig. 1, map. (From F. O. Soils, 1914.) Price, 15 cents.

Soil Survey of McDowell and Wyoming Counties, West Virginia. By W. J. Latimer. Pp. 32, fig. 1, map. (From F. O. Soils, 1914.) Price, 15 cents.

PUBLICATIONS OF THE WEATHER BUREAU.

Publications of the Weather Bureau are obtainable only from the Chief of the Weather Bureau or the Superintendent of Documents, Government Printing Office, at the prices noted herein.

Monthly Weather Review. (For sale only.) Vol. 44, No 1. January, 1916. [Mar. 28, 1916.] Pp. 1–59, charts 9, figs. 6. Price, 25 cents a copy, $2.50 a year. Payable to the Superintendent of Documents.

Special Articles: Solar and sky radiation measurements during January, 1916. By H. H. Kimball.—Solar radiation measurements at Lincoln, Nebr., 1911–1915. By H. H. Kimball.—Solar radiation measurements at Madison, Wis., 1913–1915. By H. H. Kimball.—Duration of twilight. By H. H. Kimball.—Lunar halo of July 24, 1861. By W. B. Frew.—Wind velocity and elevation. By W. J. Humphreys.—Some researches in the Far Eastern seasonal correlations. By T. Okada.—Annual hours of fog, 1885–1915. By Lighthouse Service.—The physician and the Weather Bureau. By F. A. Carpenter.—Alto-cumulus with virgulus. By C. F. Talman.—Title-page and Index for Volume 43, 1915.

National Weather and Crop Bulletin, Nos. 3, March; 4, 5, and 6, April, 1916, reporting temperature, rainfall, and crop conditions throughout the United States. (Issued weekly, on Wednesday, April to October; monthly remainder of year.) Price, 25 cents a year.

JOS. A. ARNOLD,
Editor and Chief Division Publications.

WASHINGTON: GOVERNMENT PRINTING OFFICE: 1916